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7590 01/17/2007  
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EXAMINER
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PRICE, CARL D

ART UNIT	PAPER NUMBER
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3749

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

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## DETAILED ACTION

### Response to Arguments

Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Applicant has amended the claims to be of a scope not previously considered. Consistent with applicant's argument that the prior art relied on in the previous office action fail to show, disclose and/or teach certain aspects of applicant's invention now recited in the claims filed on 10/24/2006, applicant has amended the claims to include for example at least the following:

(Claim 1)

An interchangeable piezoelectric lighter, comprising:

a casing receiving liquefied gas storage and having a switcher cavity provided therein;

a gas valve operatively extended from said liquefied gas storage for controlling a flow of gas;

a piezoelectric unit fitted in said casing for generating piezoelectricity;

an ignition button mounted to said casing in a movable manner, wherein said ignition button is arranged to compress said piezoelectric unit when said ignition button is depressed; and

a flame interchanging means for selectively interchanging a flame of said piezoelectric lighter, comprising a valve switcher movably received in said switcher cavity, wherein said valve switcher comprises at least two parallel arranged gas nozzles selectively and coaxially aligning with said gas valve for said flow of gas passing therethrough so as to produce different flames;

said valve switcher being manually movable in a direction orthogonal to both said gas nozzles so as to selectively and coaxially align said nozzles with said gas valve.

The prior art references of **US000284631 (Hall, Jr.)** and **US000773203 (Fosdick)** are now relied on to address the scope of the now claimed invention. **US000284631 (Hall, Jr.)** and **US000773203 (Fosdick)** each show a valve switcher manually movable in a direction orthogonal to a plurality of parallel gas nozzles of a different type, producing different shaped flames, so as to selectively and coaxially align said nozzles with said gas valve.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **1-29** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-29, the word "means" is preceded by the word(s) " flame interchanging " in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **1-3** and **25-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over **US003309902 (Kanamaru)** (or record) in view of **US000284631 (Hall, Jr.)** (of record) or **US000773203 (Fosdick)** (newly cited) and **US005308240 (Lowenthal)** (or record).

**US003309902 (Kanamaru)** shows an interchangeable lighter which “*is envisioned for use in virtually any type of gas fueled cigarette lighter no effort will be made to describe such conventional construction*” (see column 2, lines 7-16), comprising:

- a casing (11) receiving a liquefied gas storage;
- a gas valve (10, 16, 18) operatively extended from the liquefied gas storage for controlling a flow of gas;
- an ignition button mounted to the casing in a movable manner (not shown; “the inside top portion 22 of cylindrical member 20 is also conical in configuration and complementary with respect to top 18 of burner nozzle 10, such that when cylindrical member 20 is moved downwardly by *any conventional mechanism, such as lever 24 for example*, surfaces 18 and 22 abut precisely”), wherein the ignition button is arranged to compress the piezoelectric unit when the ignition button is depressed; and
- a flame interchanging means for selectively interchanging a flame of the piezoelectric lighter:
  - o comprising a valve switcher (20) movably received in, wherein the valve switcher comprises at least two gas nozzles (26, 30, 32, 34, 42) selectively and coaxially aligning with the gas valve for the flow of gas passing therethrough so as to produce different flames; and

wherein the flame interchangeable means further comprises a gas adapter (10, 36, 38) fitted in the lighter wherein the valve switcher (20) is supported on the gas adapter and a gas emitter (16, 18, 22) having an inlet end operatively extended from the gas valve and a gas releasing end (12) penetrated through the gas adapter so as to selectively align with one of the gas nozzles.

**US003309902 (Kanamaru)** shows and discloses invention substantially as set forth in the claims with possible exception to:

- an ignition button;

- a switcher cavity; and
- a piezoelectric unit fitted in the casing for generating piezoelectricity; and
- the valve switcher being manually movable in a direction orthogonal to a plurality of parallel gas nozzles, so as to selectively and coaxially align the nozzles with said gas valve.

**US000284631 (Hall, Jr.)** teaches, from applicant's same gas burner field of endeavor, a valve switcher (f) being manually movable in a direction orthogonal to a plurality of different parallel gas nozzles (3, 6, 9, 12), so as to selectively and coaxially align the nozzles with the gas valve.

**US000773203 (Fosdick)** teaches, from applicant's same gas burner field of endeavor, a valve switcher (8) being manually movable in a direction orthogonal to a plurality of different parallel gas nozzles (22), so as to selectively and coaxially align the nozzles with the gas valve.

**US005308240 (Lowenthal)** teaches, from applicant's same gas lighter field of endeavor, operating a gas lighter valve(s) located in a switcher cavity (figure 6) with an ignition button (24B) connected both to a piezoelectric unit (25B) fitted in the casing for generating electricity, and attached to a gas valve control lever (27B).

In regard to claims **1-3** and **25-29**, for the purpose of providing suitable means to generate and electric current to ignite the fuel gas and for the purpose of operating the valve control lever, it would have been obvious to a person having ordinary skill in the art to modify **US003309902 (Kanamaru)** to include conventional operating elements such as locating the valve and nozzle in a cavity and an ignition button connected both to a piezoelectric unit (25B) fitted in the casing for generating electricity, and attached to a gas valve control lever (27B), in view of the teaching of **US005308240 (Lowenthal)**. In addition, for the purpose of providing additional optional flames, it would have been obvious to a person having ordinary skill in the art to modify the valve switcher to be manually movable in a direction orthogonal to a plurality of parallel gas nozzles of a different type, producing different shaped flames, so as to selectively and coaxially align said nozzles with said gas valve, in view of the teaching of **US000284631 (Hall, Jr.)** or

Art Unit: 3749

**US000773203 (Fosdick)**. In regard to claim 3, any one of the three nozzles (26, 34, 42) of **US003309902 (Kanamaru)** located on the outer surface, understood as the obvious structural and functional equivalent to applicant's broadly claimed "ceiling", are each capable of being windproof or resistant to wind at least to some degree, depending on the amount of wind. Applicant having provided no structure that would otherwise distinguish the claimed invention over the prior art of record.

**Allowable Subject Matter**

Claims **4-20** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

See the attached USPTO for, 892 for prior art made of record and not relied upon which is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

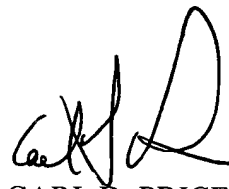
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

**USPTO CUSTOMER CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is (571) 272-4880. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Josiah Cocks can be reached on (571) 272-4874. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Primary Examiner

Art Unit 3749

CP